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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,675	11/27/2001	Masao Okubo	216132US2	8021

28970 7590 03/19/2004

SHAW PITTMAN
IP GROUP
1650 TYSONS BOULEVARD
SUITE 1300
MCLEAN, VA 22102

EXAMINER

NGUYEN, TRUNG Q

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,675

Applicant(s)

OKUBO ET AL.

Examiner

Trung Q Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Upon review, Applicant's arguments are persuasive. The examiner has withdrawn the Previous Final Rejection and re-open prosecution for the instant application. Applicant's arguments with respect to claims 2-17 have been considered but are moot in view of the new ground(s) of rejection. However, base upon the argument, the examiner is now introducing Kim and Steel Wire Handbook, which covers what are claimed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (U.S. 5,974,662) and Kim (U.S. 4,566,953) in view of Wire Association Inc (Steel Wire Handbook).

Regarding claims 2, 10 and 15-17, Eldridge et al. disclose in Figures 1-2 and in Column 12, lines 37-65 a probe card has a structure where nickel alloy is applied to the surface of a core material made of palladium alloy or beryllium copper alloy (column 12, lines 47-55).

Eldridge et al. fails to disclose a wire drawing operation with a wire-drawing die is performed. However, Kim discloses in claim 3, wherein a wire drawing of a probe card having nickel alloy applied to the surface of a core material (column 2, lines 15-20).

Therefore, at the time of the subject invention, it would have been obvious for a person of ordinary skill in the art to use the wire drawing process as taught by Kim in the device of Eldridge et al. because Wire Association Inc teach in "Steel Wire Handbook" volume I, page 279, added amounts of wire can be drawn before excessive wear results.

Regarding claim 4, Eldridge et al. disclose in column 12, lines 37-45 the non-oxidizable film herein terms are gold, platinum, rhodium, palladium, iridium, etc., and these metals are elements which are thermally diffused into tungsten via upper-most surface of probe. Wherein a wire drawing operation is performed (column 12, lines 37-65).

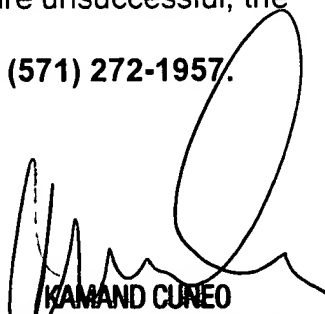
Claims 5-9, 11-14 and 16 add the limitation wherein the probe diameter is 65 micrometer, nickel alloy plating is 3-15 micrometer, old plating is about 0.2-1.0 micrometer etc. It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the probe diameter, thickness of nickel or gold plating dimension to receive the above measurements because it has been held that changes in shape and size are a matter of obvious design choice, absent any persuasive evidence that the change in configuration was significant.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trung Nguyen whose telephone number is **(571) 272-1966**. The examiner can normally be reached on Monday through Friday, 8:30AM – 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cuneo Kamand can be reached at **(571) 272-1957**.

Trung Nguyen

Patent Examiner
Group Art Unit 2829
February 10, 2004



KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800